UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

AUG 10 2015

OFFICE OF
ENFORCEMENT AND
COMPLIANCE ASSURANCE

Ms. Gina Ramos
Bureau of Land Management
1849 C Street NW, Rm 2134 LM, WO-220
Washington, D.C. 20240

Dear Ms. Ramos,

In accordance with our responsibilities under Section 309 of the Clean Air Act and the National Environmental Policy Act, the Environmental Protection Agency (EPA) has reviewed the Bureau of Land Management's (BLM) Draft Programmatic Environmental Impact Statement (Draft PEIS) on Vegetation Treatments Using Aminopyralid, Fluroxypyr, and Rimsulfuron on Bureau of Land Management Lands in the 17 Western States.

The BLM is proposing to add the herbicides aminopyralid, fluroxypyr, and rimsulfuron to its list of approved active ingredients for use on public lands under its administration in 17 Western States. These herbicides have been selected based on their effectiveness at controlling invasive plant species and their suitability for the BLM's treatment needs. The new herbicides would be integrated into the herbicide treatment activities that were assessed in the *Vegetation Treatments Using Herbicides on Bureau of Land Management Land in 17 Western States Programmatic Environmental Impact Statement* (2007 PEIS). We appreciate BLM's commitment in the draft PEIS to conduct site-specific NEPA analysis prior to initiating project-specific treatments to ensure that site-specific impacts and mitigation are considered.

The draft PEIS analyzes four alternatives, including the no action alternative, to improve the effectiveness of the BLM's vegetation management program and increase flexibility and options when designing on-the-ground herbicide treatments for up to 932,000 acres in 17 Western States. The three action alternatives include: 1) the Preferred Alternative which provides for aerial and ground application of the three proposed active ingredients, 2) only ground-based application of the three proposed active ingredients, and 3) an alternative that restricts the use to only non-acetolactate synthase-inhibiting active ingredients (No Rimsulfuron).

Based on our review of the draft PEIS, we offer the following comments:

Relevant Updates since the 2007 PEIS

In May 2015, the Pollinator Health Task Force issued a *National Strategy to Promote the Health of Honey Bees and Other Pollinators*[1] which tasked federal agencies with helping to improve

[1] The National Strategy to Promote the Health of Honey Bees and Other Pollinators is available at: https://www.whitehouse.gov/sites/default/files/microsites/ostp/Pollinator%20Health%20Strategy%202015.pdf

pollinator health. In the strategy, BLM is tasked with including pollinator friendly plants in land management programs and identifying plant species that are most beneficial to pollinators to consider in regional development programs. In addition, the U.S Forest Service and BLM issued a joint document highlighting pollinator-friendly best management practices for Federal Lands which guides federal land managers to effectively and efficiently use available resources and engage public and private partnerships in taking action for the conservation and management of pollinators and pollinator habitat on federal lands. The final PEIS should briefly discuss these new resources and describe how activities involving the use of herbicides for vegetation management, including the addition of these three herbicides, may impact implementation of these best practices and the national strategy.

As a result of a U.S. Sixth Circuit Court of Appeals decision in *National Cotton Council, et al. v. EPA*, as of October 31, 2011, point source discharges of biological pesticides, and chemical pesticides that leave a residue, into waters of the U.S. are required to comply with National Pollution Discharge Elimination System (NPDES) requirements. Therefore, NPDES permits are required for pesticide applications directly to, over, or near water and may be required for certain instances on public lands. The final PEIS should include a discussion of the new permitting requirements and outline a framework for obtaining a NPDES permit for project-specific treatments to ensure that site-specific impacts and mitigation are considered.

Water Resources

EPA is concerned about unintended consequences that may result from applications of herbicides such as drift, effects on non-target species, accidental spills, and persistence in soils that may erode into waterways; especially in designated habitat conservation areas. For example, application of the three proposed herbicides near streams within Riparian Habitat Conservation Areas (RHCA) should follow requirements of the Pacific Anadromous Fish/Inland Native Fish (PACFISH/INFISH) management strategies that limit ground-disturbing activities within RHCA. Additionally, BLM should adhere to prescribed buffers i.e., 300 ft. on all fish-bearing streams and 150 ft. on streams without fish for improved protection of aquatic resources in RHCAs from herbicide application projects. The final PEIS should clarify plans for treatment of invasive plants within buffer zones and anticipate measures to take to protect water quality within nearby waterways; including specific mitigation measures for wetlands and riparian areas to offset potential impacts associated with the three proposed herbicides.

In areas where there are soils with high infiltration rates, herbicides that are highly soluble in water have the potential to leach into such soils and contaminate surface and groundwater, potentially causing exceedances of water quality and/or drinking water standards. In addition, no water quality standards exist for herbicides such as the proposed aminopyralid, which has the highest mobility, with some modeling data suggesting that leaching can occur to 60 inches or greater in all soil types in average rainfall/cool climates and a higher likelihood of reaching groundwater than all other herbicides. Therefore, EPA recommends that future site-specific NEPA analyses include risk assessment data for adjuvants proposed for use with the three proposed herbicides on BLM land. Additionally, BLM should consider excluding application of herbicides near waterbodies with no water quality data and designated source water protection areas.

Many invasive plants on public lands are associated with roads, trails, paths, and other areas where the soil has been disturbed and/or compacted resulting in enhanced runoff and unanticipated significant impacts. Therefore, the final PEIS should highlight a process to assess those areas when site specific actions will be taken. Extensive chemical treatment activities have the potential to increase erosion and sediment delivery to drainages from the creation of barren ground from invasive plant removal. Applied herbicides could also be discharged to aquatic habitats via surface runoff, wind drift, leaching, or accidental spills. Cumulatively, water quality could also be impacted as a result of effects from other projects on BLM lands, including, but not limited to, road and trail construction and maintenance activities, livestock grazing along drainages, and recreational activities adjacent to drainages. Treatments near 303(d) listed waters or road ditches that drain into waterways could further degrade water quality due primarily to sediment, herbicide, and temperature loadings (vegetation removal). The final PEIS, therefore, should identify added precautions that will be used when applying the herbicides near streams or road ditches that drain into streams to minimize or avoid drift impacts and sublethal effects to aquatic life. Additionally, EPA recommends that BLM commit to using EPA certified Drift Reduction Technology as it becomes available[2].

Treatment Screening and Assessment Process

The draft PEIS outlines the process the BLM considers to determine the suitability of the herbicide at that location; including herbicide and target site characteristics. As a part of the site-suitability process, EPA recommends that BLM contact the USDA Natural Resources Conservation Service to determine whether the application sites are highly erodible or the soil is prone to wind erosion (light, sandy soils). In addition, BLM should consult with each state lead agency responsible for pesticide regulations prior to use where soils are susceptible to wind erosion or there are sensitive crops grown in the area in order to minimize unintended impacts.

Aminopyralid has been known to be persistent in composted materials. Therefore, EPA recommends that the final PEIS commit to ensure that following the application of Aminopyralid to an area, BLM should conduct site assessment and ensure that plant materials are not removed and introduced into any composting activities.

Air Quality

The draft PEIS utilized the air quality analysis completed for the 2007 PEIS since the proposed action does not increase the total amount of herbicide application. However, during the review of the 2007 PEIS, EPA identified several issues with the air quality emissions inventory and modeling. These issues may lead to an underestimate of cumulative impacts to air quality due to lack of consideration of other management activities that will be conducted under the land management plan that potentially have impacts to air quality. Therefore, concerns regarding cumulative impacts to air quality still remain.

Vegetation and Wildlife

Application of herbicides such as aminopyralid, have the potential to damage a variety of vegetation communities, including macrophytic species (wetland vegetation), grasslands, and forbs, resulting in reduced growth, curling, chlorosis and/or necrosis and plant death. In particular, use of aerial applications may harm non-target forage and cover species more than

[2] http://www2.epa.gov/reducing-pesticide-drift/about-drift-reduction-technology-program

other methods. It is also possible that the number of acres treated annually may increase in years in which herbicides are applied aerially, which would increase the adverse effects of herbicide application to non-target vegetation in those areas.

Herbicide treatments could also impact wildlife and livestock due primarily to direct spray, accidental spills, drift, and ingestion of contaminated vegetation, prey species, or water. Effects to animals could include death, damage to vital organs, decrease in growth, decrease in reproductive output and condition of offspring, and increased susceptibility to predation. Wildlife in particular could experience disruption of dispersal and foraging, which could expose some species to greater predation related to habitat and cover losses. Overall, terrestrial and aquatic applications of herbicides are likely to alter vegetation and have secondary indirect effects on animals, including food availability and habitat quality.

While we appreciate the ecological risk assessment data provided in the draft PEIS, we recommend the risk assessment include evaluation of risks from incidents that applicants are required to report for each herbicide proposed for use e.g., wind erosion, and tailor the evaluation to local conditions so accurate risks may be known. Additionally, it may be appropriate to include a broader search of the ecotoxicity data for these chemicals by also providing data from the open literature via ECOTOX[3].

Wetlands

Non-target wetland and riparian areas could be exposed to herbicides transported from upland areas via a variety of methods. The primary potential impacts would be loss of non-target native vegetation and contamination of water or soil, particularly as a result of an accidental spill. Therefore, we recommend the final PEIS emphasize the importance of using all herbicides, especially near waters and wetlands, consistent with the limitations and instructions included on herbicide labels. Using herbicides near waters is subject to NPDES permitting, which requires compliance with herbicide labels to avoid impacts to aquatic resources.

GHG and Climate Change

We appreciate the discussion of climate change and the inclusion of GHG emissions associated with the proposed action and alternatives. While the draft PEIS acknowledges the 2010 Council on Environmental Quality (CEQ) draft guidance on analyzing climate change impacts in NEPA, we believe the most recent CEQ Revised Draft Guidance for Federal Agencies' Consideration of GHG Emissions and Climate Change (2014) provides a reasonable approach for conducting analyses of GHGs and climate change impacts. We note that the draft PEIS compares the GHG emissions to the 17 states and national emissions; we believe this approach does not provide meaningful information for a programmatic-level analysis. We recommend that the NEPA analyses provide a frame of reference, such as an applicable Federal, state, tribal or local goal for GHG emission reductions, and discuss whether the emissions levels are consistent with such goals.

While the Chapter 3 Greenhouse Gas Emissions and Climate Change section notes that "regulatory agencies recognize that GHG emissions from a particular project cannot be tied specifically to climate change impacts," we recommend agencies follow the approach

[3] http://cfpub.epa.gov/ecotox/

recommended in the CEQ guidance of using the projected GHG emissions as proxy for assessing a proposed action's potential climate change impacts. This allows an agency to present the environmental impacts in clear terms and with sufficient information to make a reasoned choice between the no-action and alternatives and mitigation.

Lastly, the draft PEIS states that no mitigation measures would be necessary for potential air quality and climate change impacts. We recommend that the final PEIS identify and commit to implementation of reasonable mitigation measures to include at the project level to specifically reduce GHG emissions such as using energy efficient equipment and limiting idling when possible.

Based on our review of the PEIS, we have rated the proposed action an EC-2 (Environmental Concerns – Insufficient Information). A copy of EPA's rating criteria is enclosed. If we can provide further explanation of our comments, I can be reached at 202-564-5400, or you can contact Jessica Trice of my staff at 202-564-6646.

Sincerely,

Susan E Bromm

Susan E. Bromm
Director
Office of Federal Activities